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UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Service

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ARS 44-73
June 1960

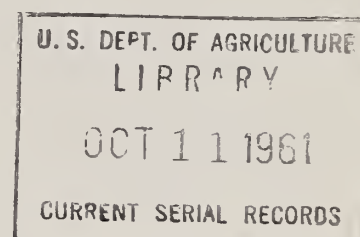
Diurnal Patterns of Bovine Body Temperature 1/

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Vaginal temperatures were measured continuously in several categories of dairy cattle. Included were young heifer calves and normally cycling, pregnant, and ovariectomized cows. Typical curves illustrating the types encountered are shown in Figure 1. The incidence of each type is indicated below the curve. Approximately 75 per cent of the curves were bi- or polyphasic and tended to show the following general features:

- a. Elevations in the morning (5 - 7 a.m.) and again in the afternoon (1 - 6 p.m.).
- b. The afternoon rise was usually higher than the morning peak.
- c. Body temperature was low in the evening and early hours of the morning.
- d. The mean daily fluctuation in body temperature from high to low was 1.22° F. (range, 0.6 - 2.7° F.).

Values illustrating the mean body temperatures for the various classes of animals are shown in Table 1.



1/ Summary of paper presented at the Annual Meeting of the American Dairy Science Association, June 19-22, 1960 at Utah State University, Logan, Utah.

Table 1
Vaginal Temperatures of Dairy Cattle

Category of dairy cattle	No. Animals	No. Days	Mean Daily			Fluctuations °F.
			Temp. °F.	High °F.	Low °F.	
Normal Cycling Cows	4	44	100.73	101.41	101.15	1.25
Ovariectomized Cows	4	31	100.62	101.32	99.96	1.35
Pregnant Cows	3	6	101.02	101.60	100.42	1.18
Calves	6	21	101.62	102.18	101.18	1.00

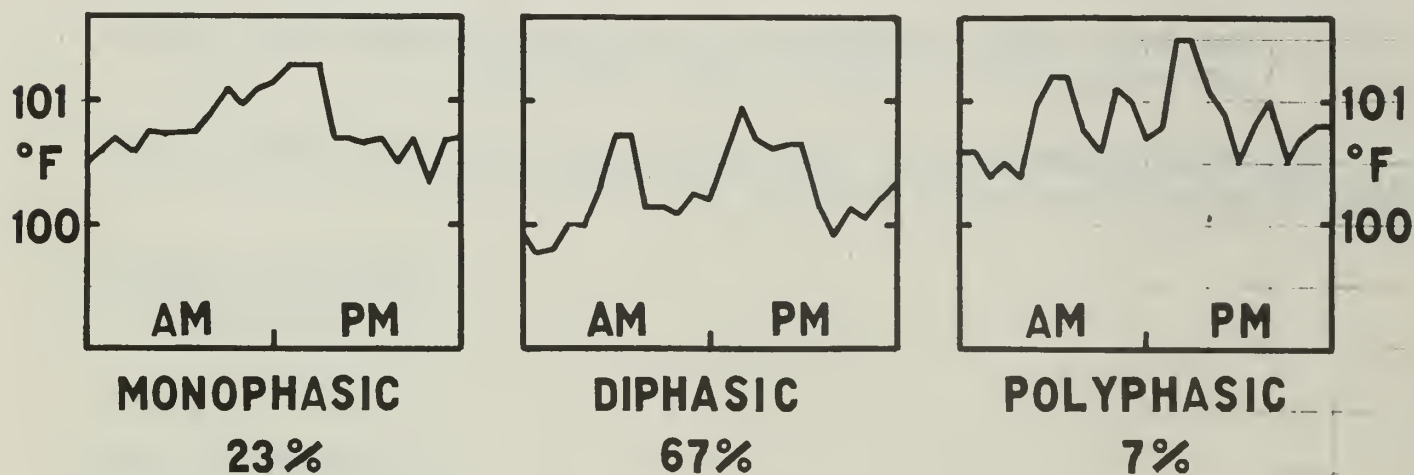


Fig. 1. Types of diurnal temperature patterns.